

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/EP2005/002378

International filing date (day/month/year)  
07.03.2005

Priority date (day/month/year)  
10.03.2004

International Patent Classification (IPC) or both national classification and IPC  
A23P1/16, A47J43/044, A47J43/07

Applicant  
NESTEC SA

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. V Reasoned statement under Rule 43b/s.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-25
	No: Claims	
Inventive step (IS)	Yes: Claims	1-25
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-25
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1. Reference is made to the following document:

D2: US-A-5 498 757 (JOHNSON MICHAEL W ET AL) 12 March 1996 (1996-03-12)

2. Document D1, which is considered to represent the most relevant state of the art, discloses a device and a method for preparing frothed milk for use in making a beverage such as cappuccino (cf. abstract and claims 1 & 17).
  - 2.1. The subject-matter of claim 1 differs from this known method in that the milk to be foamed is stirred at a first stirring speed, which is lower than the foam generating speed and at a second stirring speed that is effective to make said liquid foam.
  - 2.2. The subject-matter of claim 11 differs from this known device in that the apparatus comprises a support, which is associated with heating means, stirring means extending at least partially into a container, means for driving these stirring means, and a cover housing said driving means, which is mobile between a first position in which said drive means are coupled to said stirring means and a second position in which said drive means are uncoupled therefrom.
3. The subject-matter of claims 1 and 11 is therefore new (Article 33(2) PCT).
4. The problem to be solved by the present invention may be regarded as the provision of a method and a device, which allow for preparing a hot milk foam of satisfactory quality for use as coffee beverage topping in a simple, inexpensive and reproducible manner.
5. The solution to this problem proposed in claims 1 and 11 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons.

D1 provides a method and an apparatus for preparing hot milk froth for cappuccino

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AUTHORITY (SEPARATE SHEET)**

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- without using stirring means. D1 does not contain any teaching that stirring would improve the properties of the milk froth.
6. Claims 2-10 and 12-25 are dependent on claim 1 and 11, respectively, and as such also meets the requirements of the PCT with respect to novelty and inventive step.

XP-002284678

AN - 1992-094774 [12]

AP - SU19894648556 19891230

CPY - BEVE-R

DC - D13 D16

FS - CPI

IC - A23G3/04 ; B01J6/00 ; C12G1/02

IN - ABARYSHEV V M; NUSINOV M S; SKU ; SKURIKHIN V M

MC - D03-H01E D03-J D05-E

PA - (BEVE-R) BEVERAGES MIN WATER

PN - SU1655972 A 19910615 DW199212 003pp

PR - SU19894648556 19891230

XA - C1992-044250

XIC - A23G-003/04 ; B01J-006/00 ; C12G-001/02

AB - SU1655972 The device has a body (1) into which granulated sugar is loaded via a hatch (4). The electric heater (12) is then switched on. When the sugar has melted, at about 140 deg.C, the mixer (5) and foam suppressor (8) are switched on. The latter breaks down the foam which forms when the molten sugar boils, and prevents any of it splashing out. The gaseous substances given off go out via a trap (17) connected to the forced suction system. Some of the product carried out by the gas settles in the trap and is returned to the appts. via the tube. When the colouring agent has been prepared, it is diluted with water supplied through a measuring tank (18). The finished colouring agent goes out via an outlet valve (10).

- ADVANTAGE - Higher productivity and reduced loss of sugar are obtd.

The device is more convenient and safer to use. Bul.22/15.6.91

- (Dwg.1/1)

IW - FOOD DRINK COLOUR AGENT PREPARATION DEVICE BLADE FOAM SUPPRESS TOP BODY COAXIAL DRIVE ROTATING FAST MIX

IKW - FOOD DRINK COLOUR AGENT PREPARATION DEVICE BLADE FOAM SUPPRESS TOP BODY COAXIAL DRIVE ROTATING FAST MIX

INW - ABARYSHEV V M; NUSINOV M S; SKU ; SKURIKHIN V M

NC - 001

OPD - 1989-12-30

ORD - 1991-06-15

PAW - (BEVE-R) BEVERAGES MIN WATER

TI - Food and drink colouring agent prepn. device - has bladed foam suppressor in top of body coaxial with drive and rotating faster than mixer